



Backup



AOC Weapon System Block 10 Baseline Systems List

31 May 2001

***Based on 22 Mar 01 Systems List and
Subsequent Analysis***

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D



What's in an AOC WS Baseline?



CONOPS

Node

CONEMPs

Thread

Activity

System Function

System

- Component

Services

**AOC
SDIPT
Baseline
List**

**Configuration
Management**

- Versions
- Configurations
- Documentation
- etc

Components

- Control

- Radios

- Servers & Clients

Technical Standards

Combat Plans

Provide Direction

Build ATO

Assign Missions

TBMCS

- TAP

- SIPRNET

- AODB, MIDB

- Mail

Routers

- ISSE Guard

- N/A

- Sun Ultra

TCP/IP, Gig E

**Operational
Architecture**

**Systems
Architecture**

**Technical
Architecture**



AOC WS Block 10

Baseline Component Classes



- **Mission applications** - information systems that support one or more AOC missions areas
 - **Mission system** - software program or collection of programs that provide a basic AOC capability in one or more mission areas (e.g., TBMCS)
 - **Segments** - software program that provides a specific function within a mission system (e.g., TAP)
- **Services** - subscription access to an external source that provides value-added information
- **Infrastructure** - permanently installed framework supporting mission applications
 - **Networks** - membership required, push and pull participation, standards
 - **Terminals** - equipment required by mission systems, services, or networks, external interfaces
 - **Radios and Transmission Equipment** - communications equipment required by the AOC WS to accomplish its mission



Block 10 Baseline Selection Criteria



- **Components must provide functionality needed in an AOC**
- **Components must be “common” among existing “baselines”**
 - **AOC SDIPT Block 10 List**
 - **PSAB, as a guide**
 - **CAOC-X, as a guide**
- **Components “controllable” by AOC weapons system program office**
- **Common support equipment is not part of the baseline, but may be required to support the baseline (e.g. servers, crypto, telephones, radios)**



Baseline Mission Applications - 1



		S/W Version	Description
Command and Control Information Processing System	C2IPS	3.6/3.2.2	Monitors and plans theater airlift
Demand Driven Direct Digital Dissemination	5D	4.0.4.4	Imagery system (legacy)
Generic Area Limitation Environment Lite	GALE Lite	4.3.2	Track correlator & SIGINT analysis
Global Command and Control System	GCCS	3.2	COP, C2PC, & I3
Global Decision Support System	GDSS		AMC Force Level C2 System
Imagery Product Library	IPL		



Baseline Mission Applications - 2



		S/W Version	Description
Joint Deployable Intelligence Support System	JDISS	2.01G	Automation support for intelligence mission
Operational Model Exploiting GPS Accuracy	OMEGA		GPS accuracy prediction
PC Integrated Intelligence and Imagery	PCI3		Supports unit interface with Broadsword
Planning and Decision Aid System	PDAS		Assists preparation of ATO



Baseline Mission Applications - 3



		S/W Version	Description
Personnel Recovery Mission Software	PRMS	1.0	Aids return of personnel to friendly forces
RAINDROP (Legacy)		3.1	Mensuration application
Requirement Management System	RMS	7.2	Processes imagery requests



Baseline Mission Applications - 4



		S/W Version	Description
Theater Battle Management Core System	TBMCS	1.0.1	ATO production and execution
Theater Weather Server	TWS		Theater oriented weather information
Worldwide Origin Threat System	WOTS		TMD warning system
Weapons System Video	WSV		Playback viewing of cockpit video
Others Leading to Block 20			TBD



AOC WS Block 10 Baseline Mission Applications - Special Cases - 1



		S/W Version	Description
Air Defense Operations C2 System	ADOCCS		Air defense artillery force operations
All Source Analysis System	ASAS		Army intelligence fusion
Air Missile Defense Workstation	AMDWS		Air defense artillery force operations
Army Field Artillery Targeting Distribution System	AFATDS		C2 system for fire support
Global Transportation Network	GTN		Airlift movement information



AOC WS Block 10 Baseline Mission Applications - Special Cases - 2



		S/W Version	Description
Space Battle Management Core System	SBMCS	1.0/Java 1.2.2	Satellite track data and analysis tool
Global Command and Control - Army	GCCS-A		Battlespace Awareness
Global Command and Control - Maritime	GCCS-M		Battlespace Awareness
Maneuver Control System	MCS		Monitor and control Army tactical ops
Special Operations Command Research Analysis Tool and Evaluation System	SOCRATES		Intel support for SOF mission



AOC WS Block 10

Baseline Services



		Description
Broadsword 3.1		Information Services
Defense Message System	DMS	Message Network
Global Broadcast System	GBS	High volume intelligence, weather, and other information
Predator Video		Video from Predator UAV
Tactical Data Information Exchange System-Broadcast	TADIX-B	Global detection and cueing information
Tactical Intelligence Broadcast System	TIBS	Theater information with track accuracy
Others Leading to Block 20		TBD



Baseline Infrastructure Networks - 1



		Description
Community of Interest Network	COIN	Coalition Network
Radiant Mercury		Sanitizes and downgrades formatted classified documents
Imagery Support Server Environment Guard	ISSE-Guard	Exchange of information for networks of dissimilar security levels
Joint Worldwide Intelligence Communications System	JWICS	Intelligence Network



Baseline Infrastructure Networks - 2



		Description
Sensitive but Unclassified Internet Protocol Network	NIPRNE T	Unclassified IP Network
NSA Threat Warning Net		UHF Satcom Threat warning
Secure Internet Protocol Router Network	SIPRNE T	Secure IP Network
Tactical Data Links in formats A, B, and J	TADIL A/B/J	Exchange of tactical data network
Purple Net		UHF Satcom Network
Air Operation Net		UHF Satcom Network
Others Leading to Block 20		TBD



AOC WS Block 10 Baseline Infrastructure Terminals/Radio - 1



		Description
Air Defense System Integrator - TSQ-214	ADSI	Receives TADIL, TIBS, and TRAP
Deployable Transit-case System	DTS	Predator Imagery support
Joint Services Work Station	JSWS	JSTARS support
Joint Tactical Air Ground System	JTAGS	Data acquisition from DSP
Precision Lightweight Global Position Receiver	PLGR	Supports OMEGA



AOC WS Block 10 Baseline Infrastructure Terminals/Radio - 2



		Description
Tactical Data Processing Suite	TDPS	Receives/Processes ELINT
Tactical Data Terminal	TDT	Rivet Joint
Tactical Receive Suite	TRS	Feeds ADSI (TADILs), TIBS and TRAP Receiver
Tactical Receive Equipment (Legacy)	TRE	TIBS and TRAP Receiver
Others Leading to Block 20		TBD



AOC WS Block 10

PSAB Extensions - 1



		S/W Version	Description
British Profile Management Initiative	BPMI		Security interface for British access
Eagle Express		Arcview 3.2	NIMA data manipulation tool
HAVE CSAR			Search and rescue
Hummingbird Exceed		7.0	Integrates PC and X computers
Imagery Tracking System	ITS		Access to IMDB
Information Work Space	IWS	1.5.2	Collaboration tool
Link Management System-11	LMS-11		Link 11 data reception



AOC WS Block 10

PSAB Extensions - 2



		S/W Version	Description
Sky Media			View NIMA commercial imagery
CENTRIX COIN			Central region COIN
TADIL S			TADIL used by PSAB



AOC Weapon System Block 10 Baseline SV-4 Functional Block 31 May 2001 Diagrams

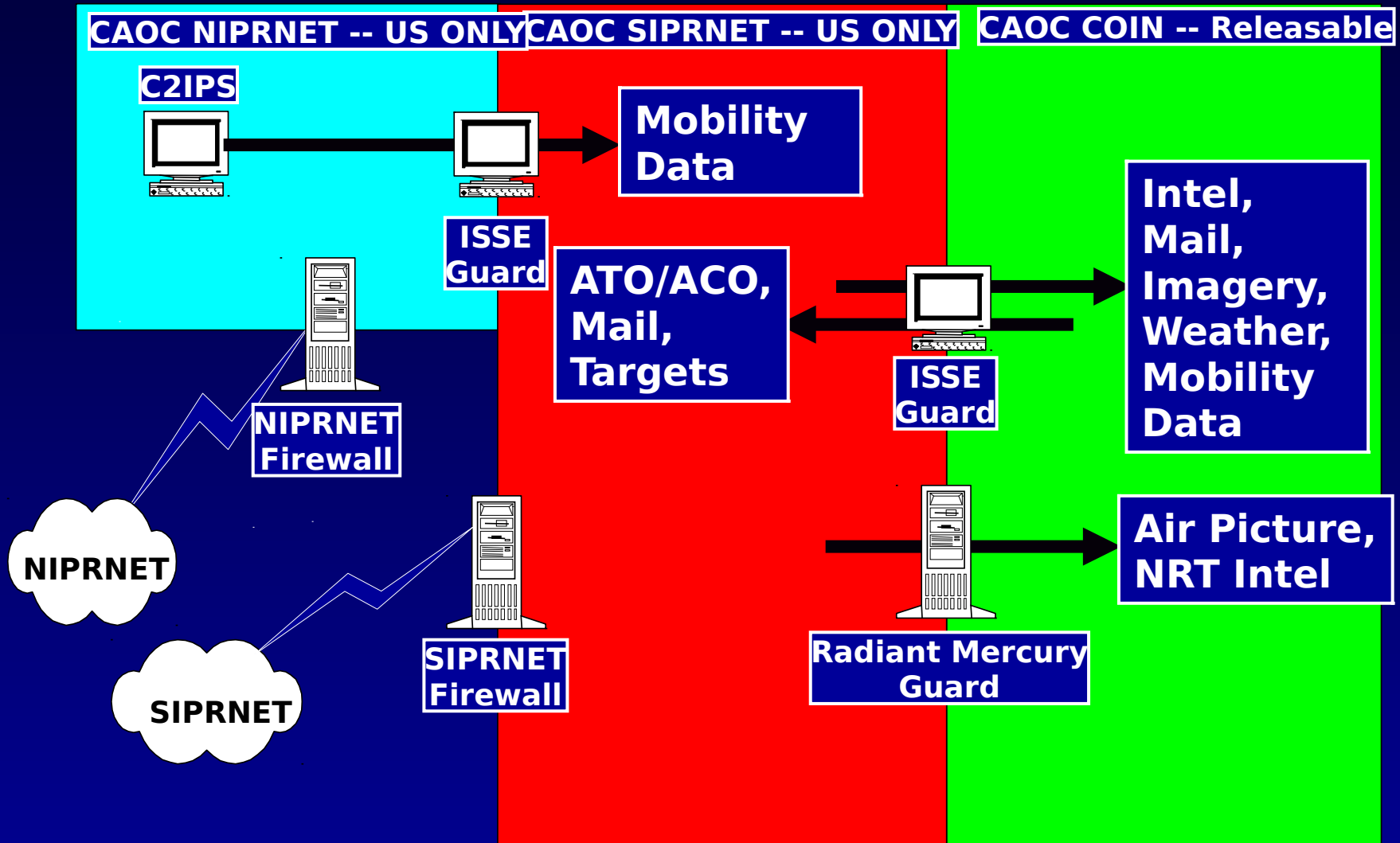
***Based on DSAWG-Approved Diagrams
for PSAB***

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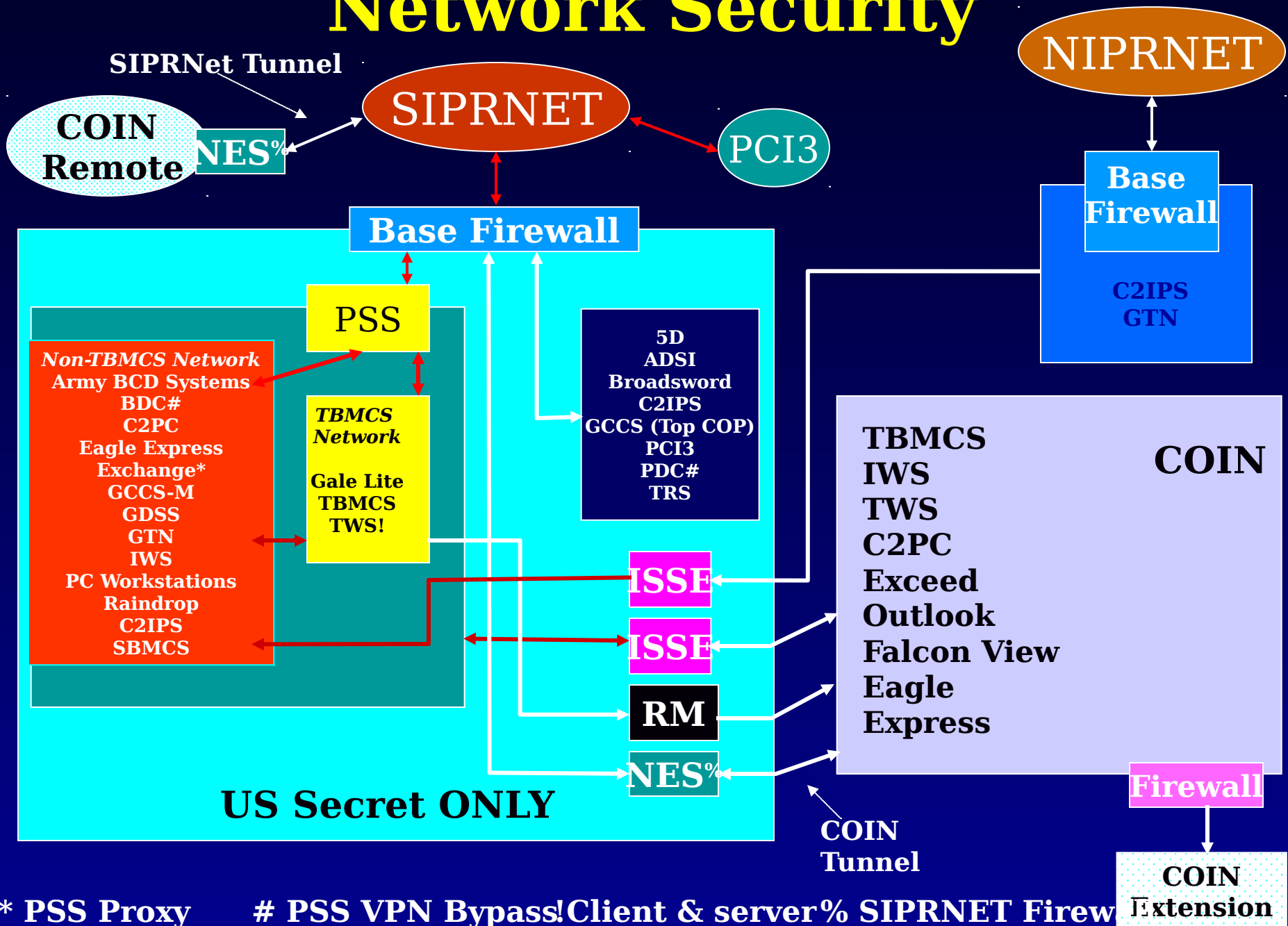
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Network Relationships



Network Security



US Secret ONLY

**COIN
Tunnel**

Firewall

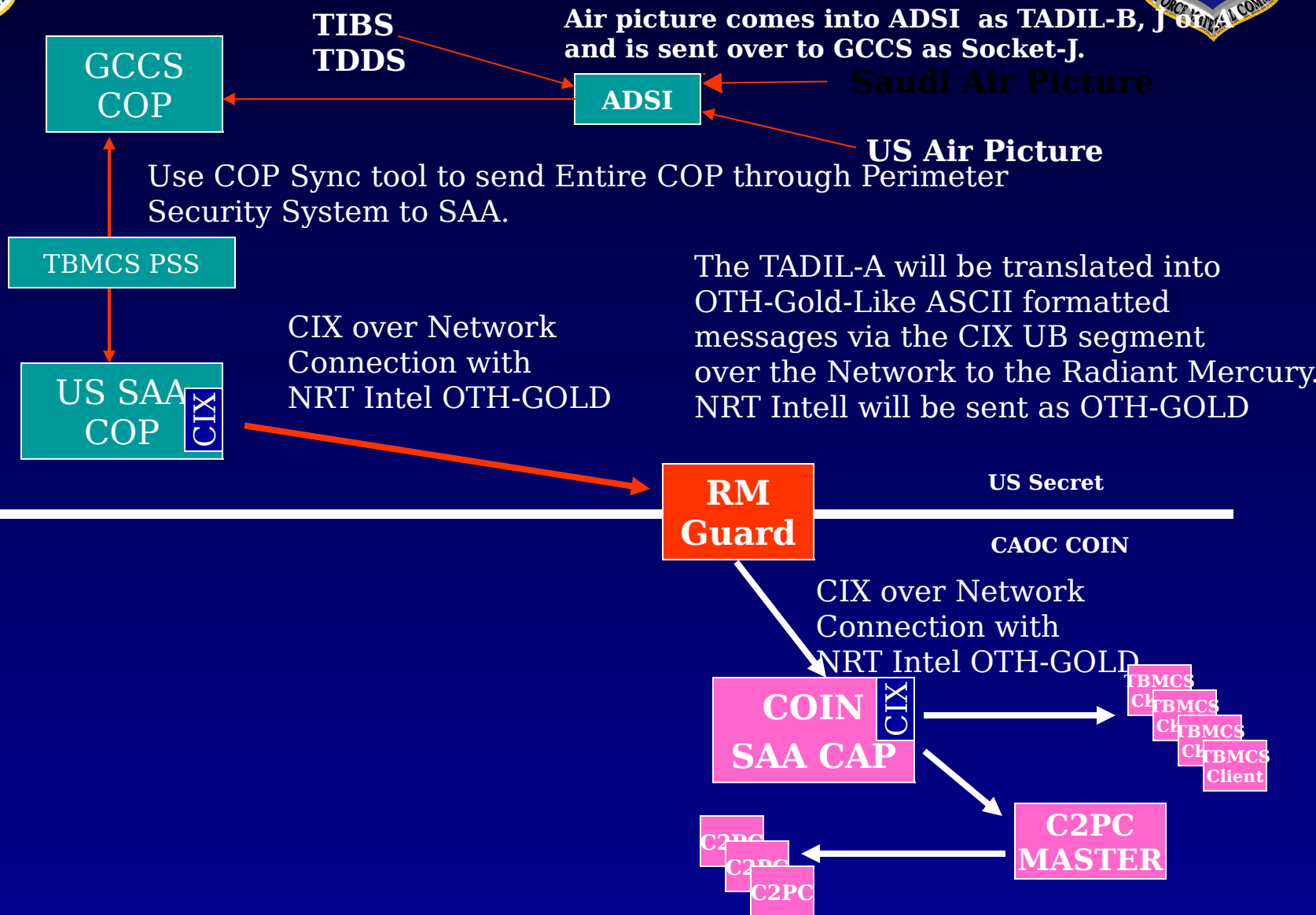
**COIN
Extension**

* PSS Proxy
Block 10

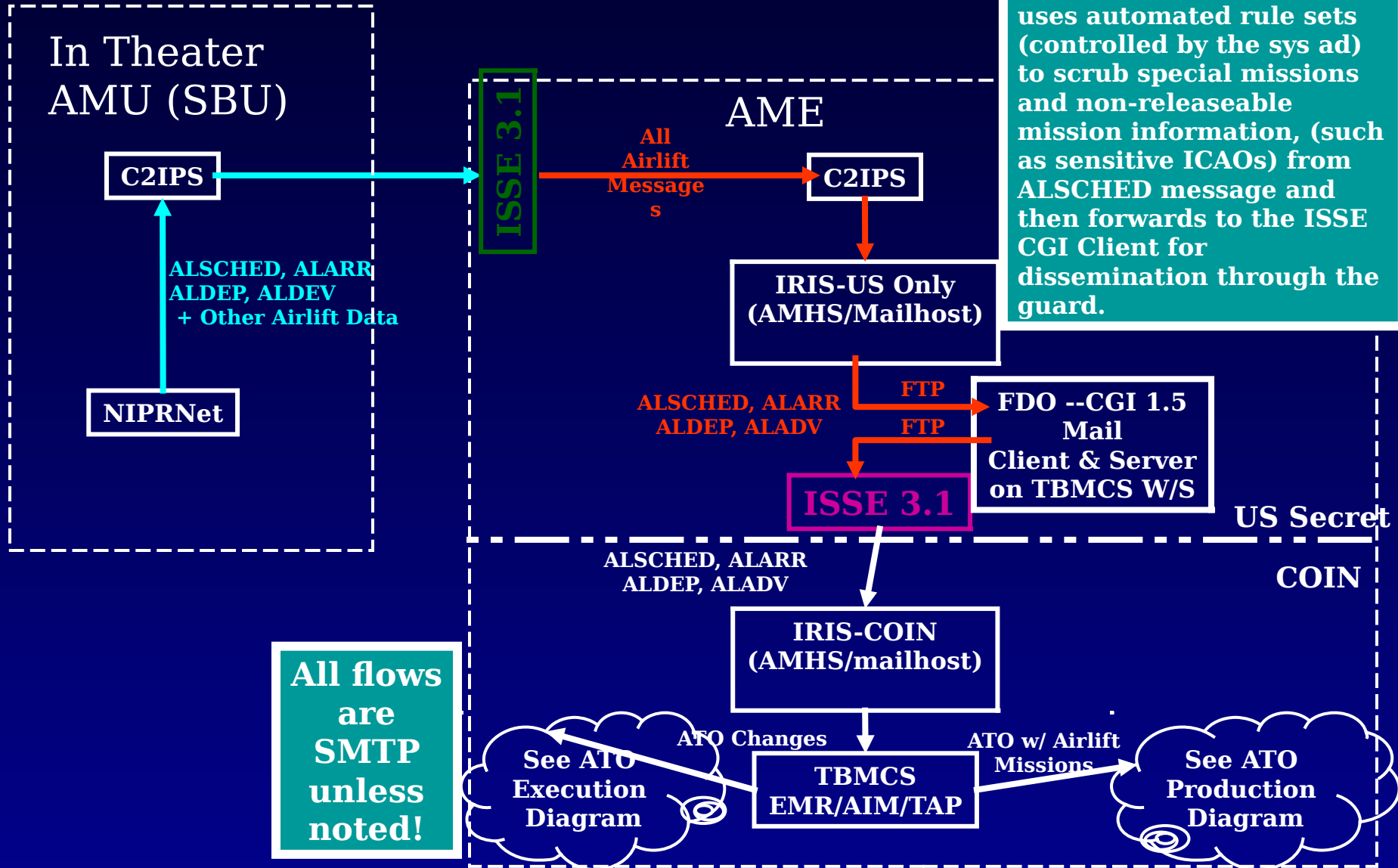
PSS VPN Bypass! Client & server% SIPRNET Firewall



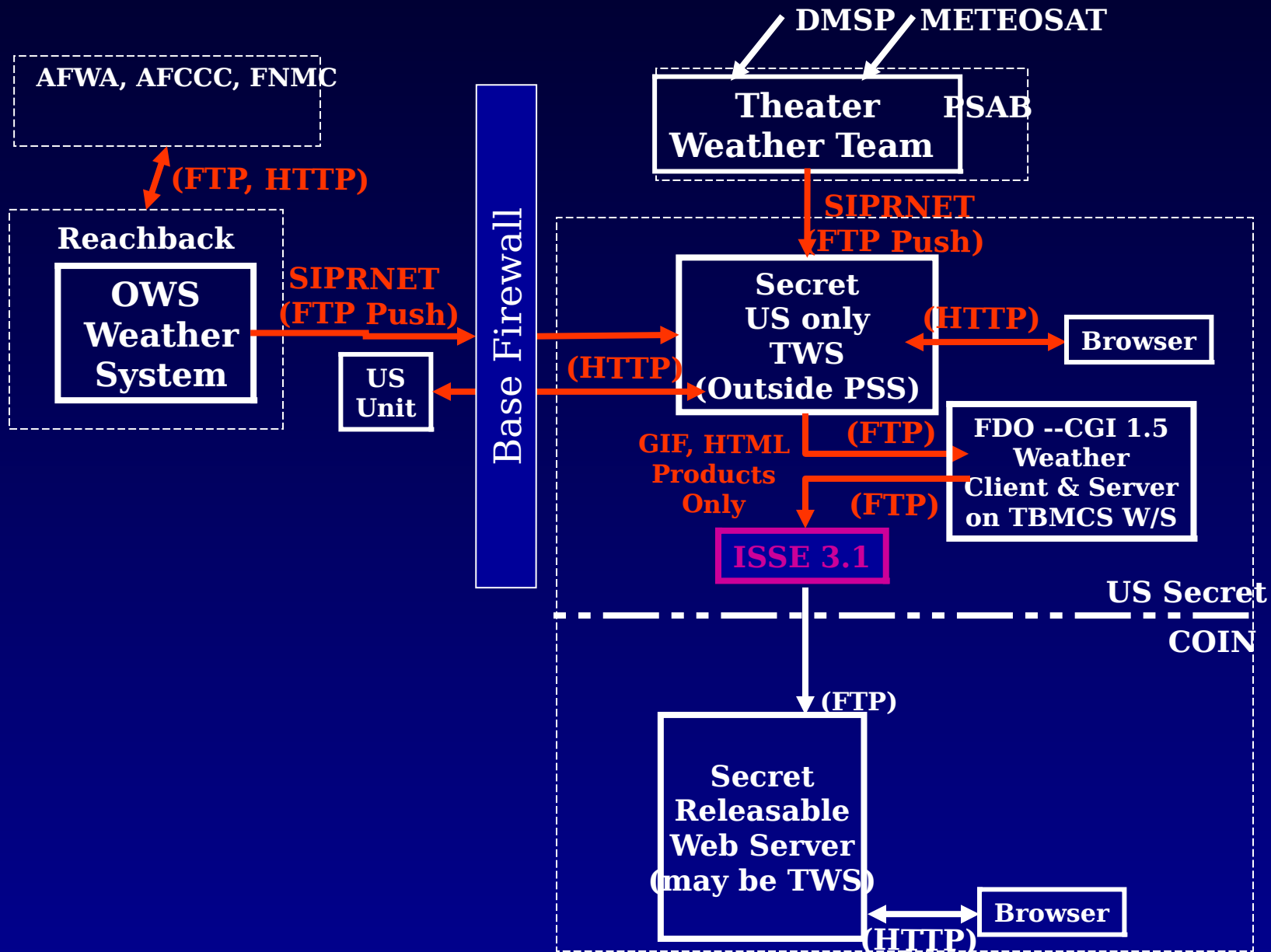
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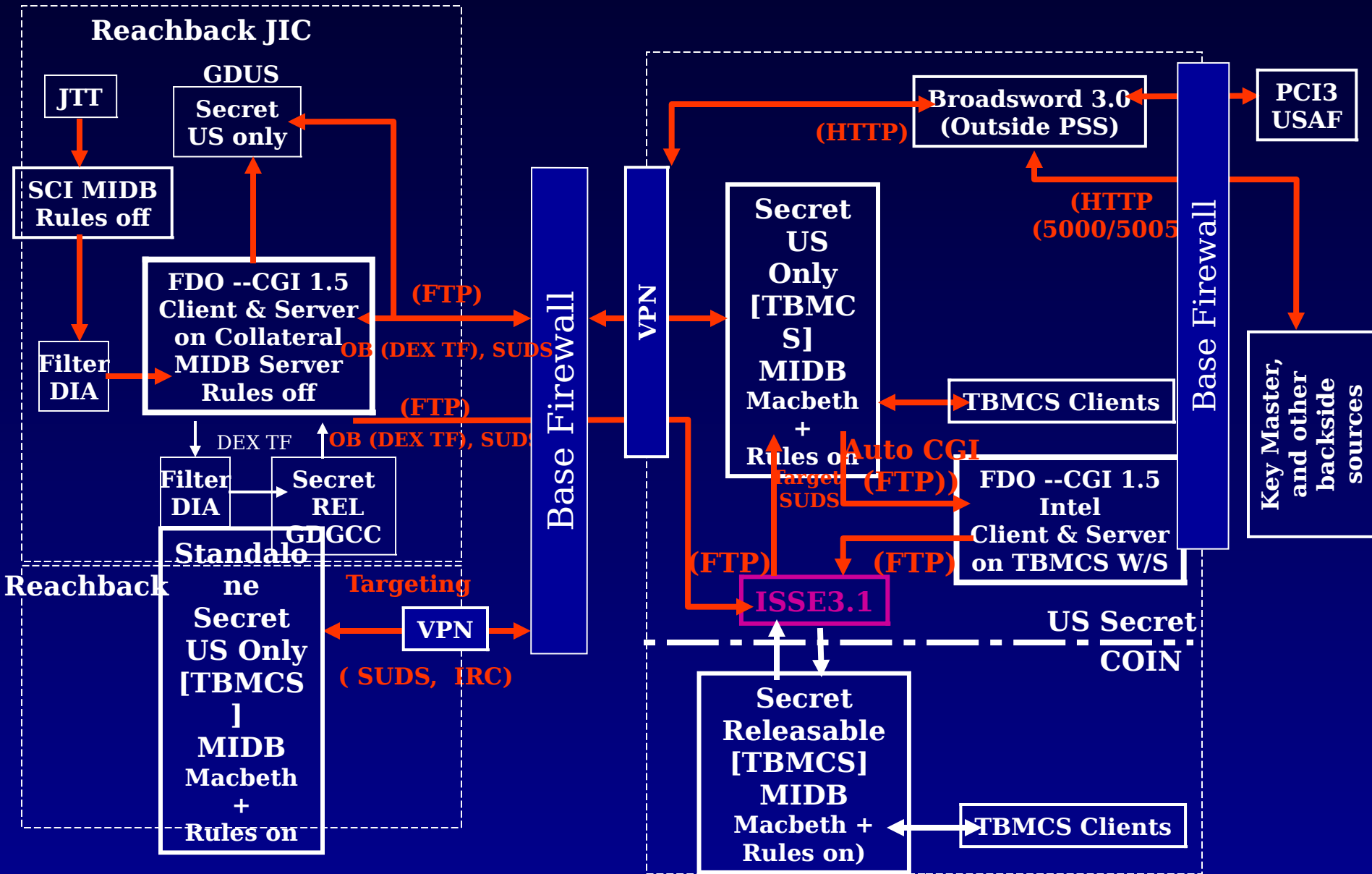
In-theater AMU



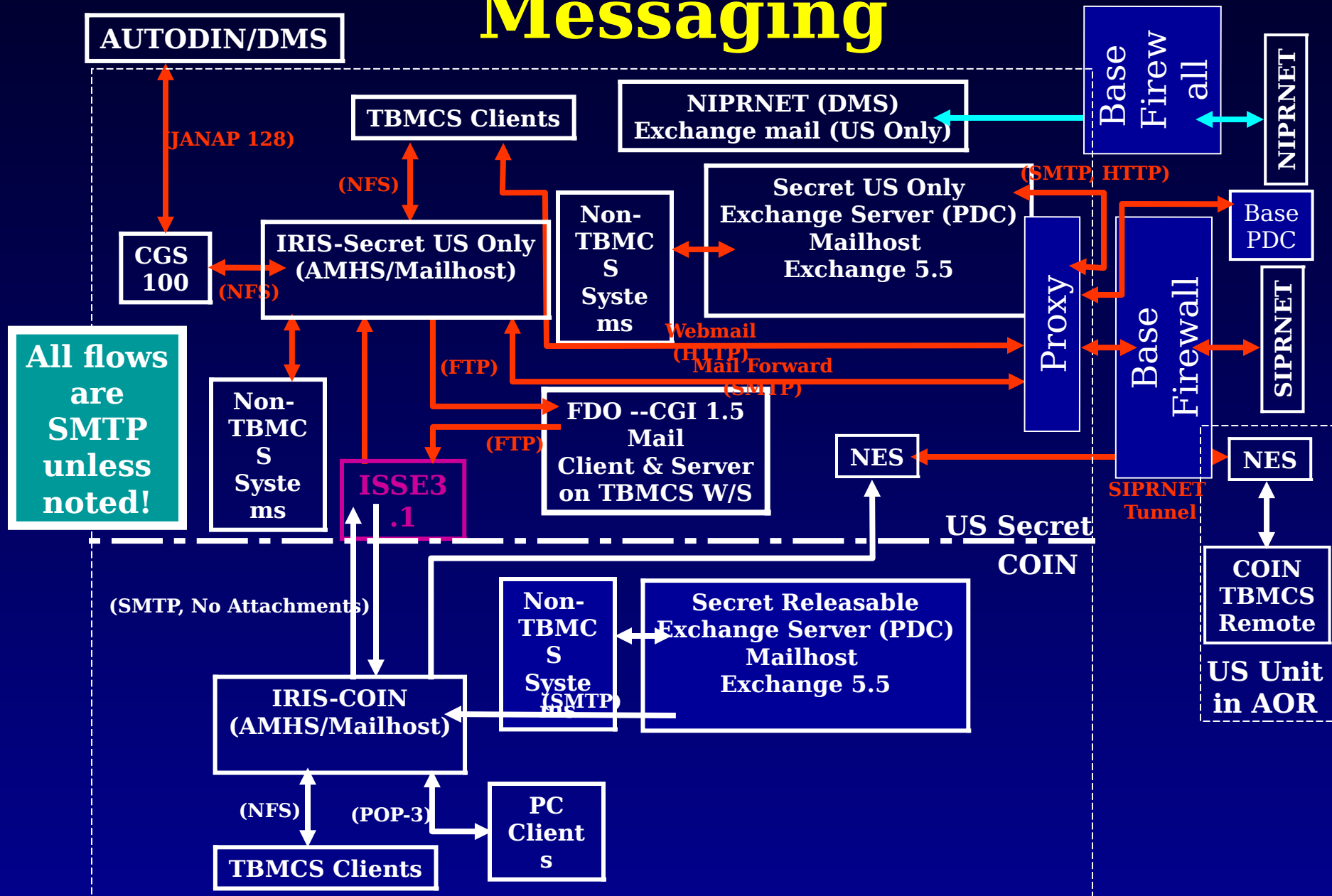
Weather Data



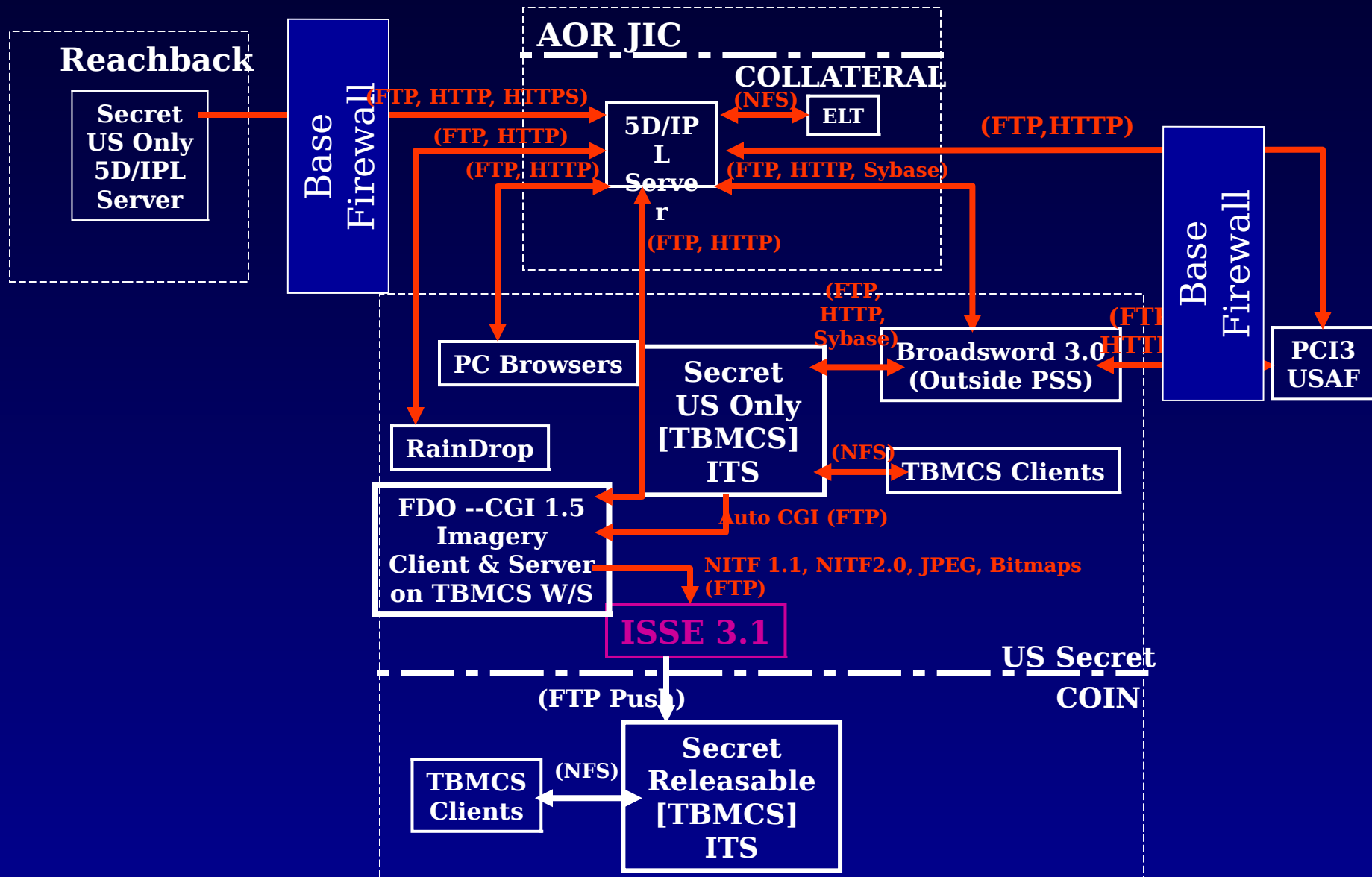
Intel Databases



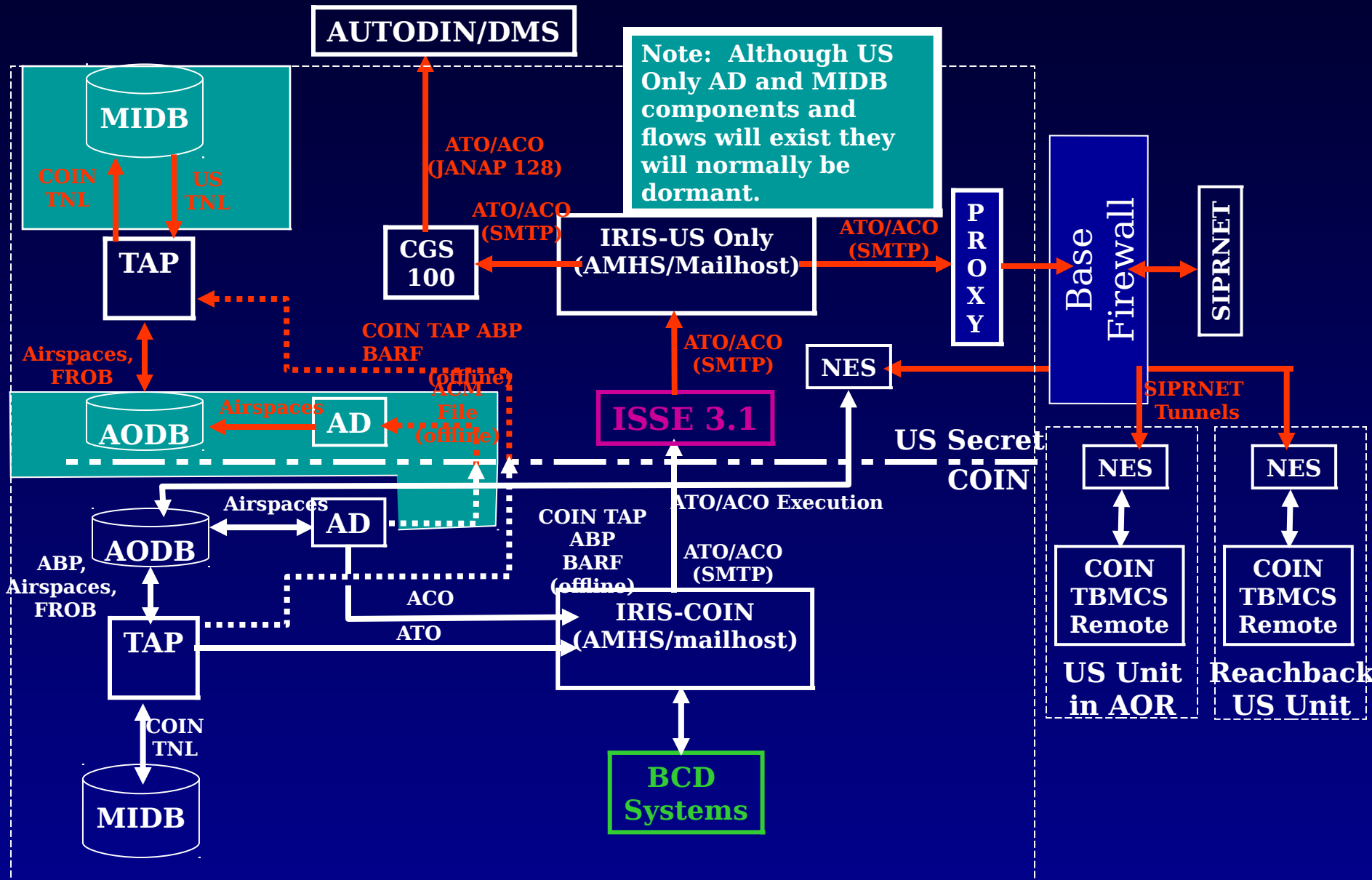
Messaging



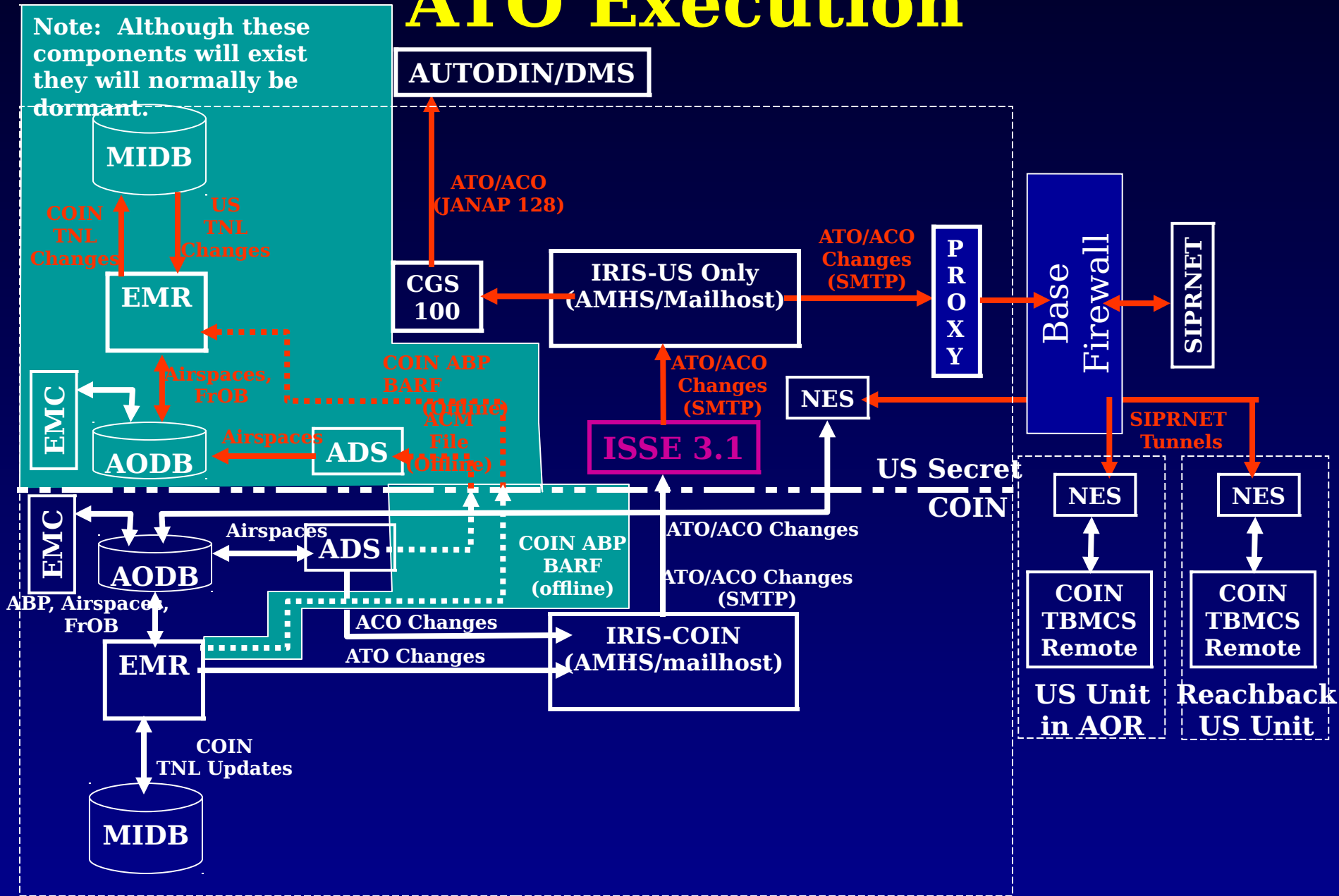
Imagery Data



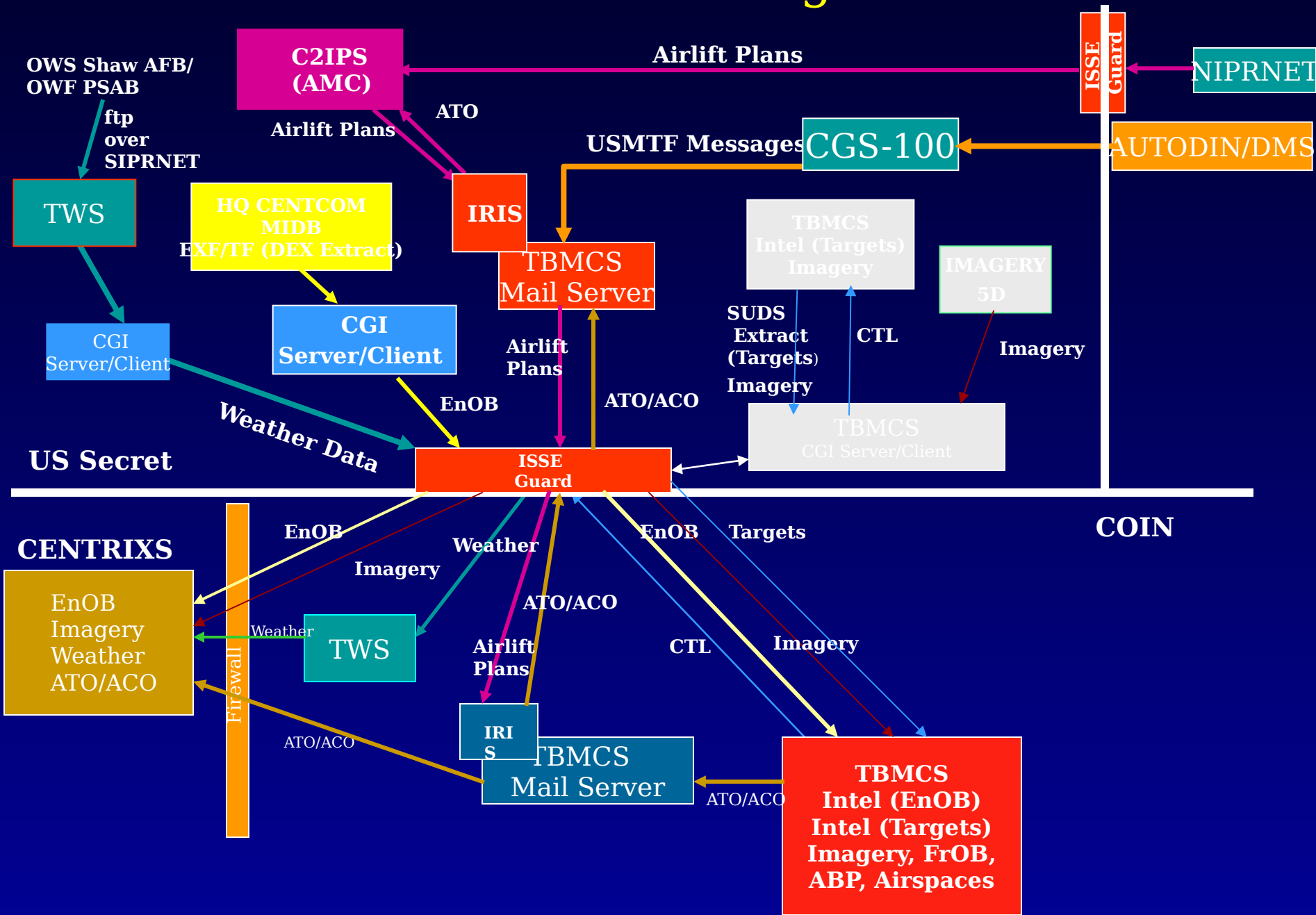
Block 10



ATO Execution



Data Flows Through ISSE





ATO/AC Tool
ABP - Air Battle Plan
ACDB - Air Campaign Data Base
ACM - Airspace Control Measure
ACO - Airspace Control Order, Air Coordination Order
AD - Airspace Deconfliction
ADSI - Air Defense System Integrator
AFATDS - Advanced Field Artillery Tactical Data System
AFMSS - Air Force Mission Support System
AFORMS - Air Force Operations Resource Management System
AGCCS - Army Global Command and Control System
AIM - Airlift Import Manager
AOC - Air Operations Center
ASAS - All Source Analysis System
ATDL - Army Tactical Data Link
ATDSI - Advanced Tactical Data System Interface
ATO - Air Tasking Order
AUTODIN - Automatic Digital Network
AWDS - Automated Weather Distribution System
AWN - Air Weather Network
BCT - Battlefield Communications Terminal
BCTI - Battlefield Control Terminal Interface
C2IPS - Command and Control Information Processing System
CAFWSP - Combat Air Force Weather Software Package
CAMS - Core Automated Management System
CAST - Close Air Support Tool
COP - Common Operating Picture
CRC - Control and Reporting Center
CTL - Candidate Target List
DBCN - Database Change Notification
DM - Data Management
EnOB - Enemy Order of Battle
EMR - Execution Management Replanning
FLEX - Force Level Execution
FLYOPS - Flight Operations
FrOB - Friendly Order of Battle
GCCS-A - Global Command and Control System - Army
HUAV - Hunter Unmanned Aerial Vehicle

Acronyms



IDM - Intel Data Management
IM - Imagery
JDP - Joint Defensive Planner
JPT - Joint Forces Air Component Commander (JFACC) Planning Tool
J-STARS - Joint Surveillance, Tracking, and Attack Radar System
LOGOD-B - Logistics Plans Base-Level Module
MAOP - Master Air Operations Planner
MIDB - Modernized Integrated Database
NABOPS - New Air Base Operations
SAA - Situation Awareness & Assessment
SBSS - Standard Based Supply System
SIPRNET - Secret Internet Protocol Network
TAP - Theatre Air Planning
TADIL A - Tactical Digital Information Link - HF/UHF radio data link
TADIL B - Tactical Digital Information Link - landline/troposcatter radio data link
TADIL J - Tactical Digital Information Link - Joint Tactical Information Distribution System (JTIDS)
TADIIXS - Tactical Digital Information Exchange System (USN)
TAP - Theater Air Planning
TC4I - Tactical Command, Control, Communications, Computer Intelligence
TCT - Time Critical Targeting
TDBM - Track Database Manager
TDDS - Tactical Data Distribution System
TE - Threat Evaluation
TIBS - Tactical Information Broadcast System
TNL - Target Nomination List
TOPS - Tactical Operation Support
TRAP - Tactical Receive Equipment and Related Applications
TRE - Tactical Receive Equipment
TRS - Tactical Receive System
TWM - Targeting and Weaponing Module
UB - Unified Build
WAN - Wide-Area Network
WS - Wing Support



Even MORE Acronyms!



EMC - Execution Management
IRC - Internet Relay Chat
NITF - National Imagery Transfer Format
JPEG - Joint Photographic Experts Group
SMTP - Simple Mail transfer Protocol
FTP - File Transfer Protocol
HTTP - Hypertext Transfer Protocol
CGI - Common Guard Interface
ISSE - Information Server Support Environment
SUDS - Support Dex Software
Dex - Database Exchange
SIPRNET - Secret Internet Protocol Router Network
NIPRNET - [N - an arbitrary letter used to denote SBU]
Internet Protocol Router Network
COIN - Community of Interest Network
CAOC - Combined Air Operation Center
PSAB -- Prince Sultan Airbase
AMU - Air Mobility Unit
AME Air Mobility Element
GIF - Graphical Image Format
HTML - Hypertext Markup Language
FDO - Foreign Disclosure Officer
PSS - Perimeter Security System
VPN - Virtual Private Network
GTN - Global Transportation Network
IWS - Information Workspace
C2WPTT - C2 Weapon Part Task Trainer
BDC - Backup Domain Controller
PDC - Primary Domain Controller
PCI3 - Personal Computer Imagery Information Intelligence
SBMCS - Space Battle Management Core System
PC - Personal Computer
DP - Distributed Producer
JWICS - Joint Worldwide Intelligence Communications System
IPL - Imagery Product Library
5D - Demand Driven Direct Digital Dissemination
CENTRIXS - Central Region Information Exchange Systems

ISSE 3.1 - ISSE Guard Boundary Element, Version 3.1
GCI 1.5 - Common Guard Interface, version 1.5
SBU - Sensitive but unclassified
FNMC - Fleet Numerical Meteorological Center
DMSP - Defense Meteorological Satellite Program
NES - Network Encryption System